

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 02-075167

(43)Date of publication of application : 14.03.1990

(51)Int.Cl.

H01M 8/24  
H01M 8/02  
H01M 8/12

(21)Application number : 63-225164

(71)Applicant : MITSUI ENG & SHIPBUILD CO

LTD

NIPPON HAKUYO KIKI KAIHATSU  
KYOKAI

(22)Date of filing : 08.09.1988

(72)Inventor : SHIMOZU MASATERU

## (54) FUEL CELL WITH SOLID ELECTROLYTE

### (57)Abstract:

PURPOSE: To have a fuel cell of high voltage, low current type by coupling together unitary cells in series, each of which consists of an oxygen electrode, solid electrolyte, and fuel electrode laminated on a gas penetrative base.

CONSTITUTION: Every three unitary cell units 18 consists of unitary cells 6a-6d with different dia. laminated concentrically. The coupling part of these unitary cell units lie on one plane, and these unitary cells 6a-6d are coupled together in series through a conductor 19 specially used for coupling, to constitute a fuel cell stack 16. In this constitution, the fuel F and air A flow through a flow path between every other unitary cells to come in contact with the fuel side electrode 4 and oxygen side electrode 3. Fuel stacks 16 are arranged at a constant spacing on a base board 7, and an air lead-in pipe 11, fuel supply pipe 12, and fuel exhaust pipe 13 are arranged below this base board 7. A fuel cell of high pressure, low current type is provided.

